



PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Altenbach, et al.

Serial No.: 10/689,735

Filed: October 22, 2003

Title: BICYCLIC-SUBSTITUTED AMINES
AS HISTAMINE-3 RECEPTOR LIGANDS

Case No.: 7000US02

Group Art No.: 1614

Examiner: (not yet assigned)

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450 on:

Date of Deposit: March 17, 2004

Tanya Parent 3/17/04
Tanya Parent Date

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL LETTER

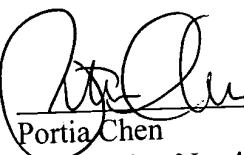
Dear Sir:

Enclosed herewith for the patent application identified above entitled BICYCLIC-SUBSTITUTED AMINES AS HISTAMINE-3 RECEPTOR LIGANDS are the following:

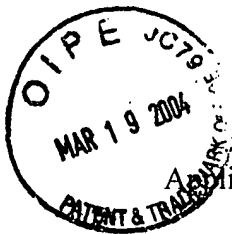
1. Information Disclosure Statement;
2. Form PTO 1449, in duplicate;
3. References as cited on PTO 1449 (91 references); and
4. Return Receipt Postcard.

The Commissioner is hereby authorized to charge any additional Filing Fees required under 37 CFR §1.16, as well as any patent application processing fees under 37 CFR §1.17 associated with this communication for which full payment had not been tendered, to Deposit Account No. 01-0025.

Respectfully submitted,
Altenbach, et al.


Portia Chen
Registration No. 44,075
Attorney for Applicants

ABBOTT LABORATORIES
Customer Number 23492
Telephone: (847) 937-8272
Facsimile: (847) 938-2623



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Altenbach, et al.

Group Art No.: 1614

Serial No.: 10/689,735

Examiner: (not yet assigned)

Filed: October 22, 2003

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the:

Title: BICYCLIC-SUBSTITUTED AMINES
AS HISTAMINE-3 RECEPTOR LIGANDS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450 on:

Case No.: 7000US02

Date of Deposit: March 17, 2004

Tanya Parent 3/17/04
Tanya Parent Date

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

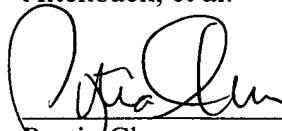
Dear Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed, to the knowledge of the undersigned, before the mailing date of a first Office Action on the merits. Applicants respectfully petition and request that the Examiner consider the listed documents and evidence such consideration by making appropriate notations on the attached form. Copies of the listed documents are attached.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

The Commissioner is authorized to charge our Deposit Account any additional fees (or credit any over payments) that may be required under 37 C.F.R. §§ 1.16 and 1.17 in association with this communication for which full payment has not been tendered.

Respectfully submitted,
Altenbach, et al.


Portia Chen
Registration No. 44,075
Attorney for Applicants

ABBOTT LABORATORIES
Customer Number 23492
Telephone: (847) 937-8272
Facsimile: (847) 938-2623

Form PTO - 1449 (Modified)

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (Modified) PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 7000US02	SERIAL NO. 10/689,735
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT(S) Altenbach, et al.	
(Use several sheets if necessary)		FILING DATE October 22, 2003	GROUP 1614
(37 CFR 1.98 (b))			

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	INVENTOR	CLASS	SUB CLASS	FILING DATE
	A1	3,639,476	02/01/1972	Eberle, et al.	260	563	11/29/1967
	A2	6,225,328	05/01/2001	Bernardon	514	356	04/23/1999
	A3	6,358,515	03/19/2002	Ogata, et al.	424	401	07/30/1999

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLIC-ATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUB CLASS	TRANS-LATION YES NO
	B1	1,178,400	21.01.1970	GB			
	B2	00/06254	10.02.2000	WO			
	B3	00/27815	18.05.2000	WO			
	B4	03/093237	13.11.2003	WO			
	B5	94/17079	04.08.1994	WO			
	B6	95/01426	12.01.1995	WO			
	B7	95/09159	06.04.1995	WO			
	B8	98/38156	03.09.1998	WO			
	B9	98/57931	23.12.1998	WO			

OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

C1	Airaksinen et al., "Histamine Neurons in Human Hypothalamus: Anatomy in Normal and Alzheimer Diseased Brains," <i>Neuroscience</i> 44(2):465-481 (1991)
C2	Andrés et al., "A Simple Stereoselective Synthesis Of Enantiopure 2-Substituted Pyrrolidines and Piperidines From Chiral (<i>R</i>)-Phenylglycinol-Derived Bicyclic 1,3-Oxazolidines," <i>Eur. J. Org. Chem.</i> 1719-1726 (2000)
C2	Aranyos et al., "Novel Electron-Rich Bulky Phosphine Ligands Facilitate the Palladium-Catalyzed Preparation of Diaryl Ethers," <i>J. Am Chem. Soc.</i> 121:4369-4378 (1999)
C4	Baston et al., "A New Route To 6-Aryl-Substituted 3,4-Dihydronaphthalene Derivates Via Pd (O)-Catalyzed Cross-Coupling Reaction of Aryl Zinc Chlorides With an Aryl Triflate," <i>Synthetic Communication</i> 28(14):2725-2729 (1998)
C5	Bjenning et al., "Peripherally Administered Ciproxifan Elevates Hypothalamic Histamine Levels And Potently Reduces Food Intake in the Sprague Dawley Rat," <i>Histamine Research In The New Millennium, Proceedings Of The International Sendai Histamine Symposium Held In Sendai, Japan, 22-25 November 2000</i> , p. 449-450
C6	Dai et al., "The First General Method For Palladium-Catalyzed Negishi Cross-Coupling Of Aryl And Vinyl Chlorides: Use of Commercially Available Pd(P(<i>t</i> -Bu) ₃) ₂ as a Catalyst," <i>J. Am. Chem Soc.</i> 123:2719-2724 (2001)

C7	De Almeida et al., "Memory Facilitation by Histamine," <i>Arch. Int. Pharmacodyn.</i> , 283:193-198 (1986).
C8	Delaunois et al., "Modulation Of Acetylcholine, Capsaicin and Substance P Effects by Histamine H ₃ Receptors in Isolated Perfused Rabbit Lungs," <i>European Journal Of Pharmacology</i> , 277:243-250 (1995).
C9	Dimitriadou et al., "Functional Relationship Between Mast Cells and C-Sensitive Nerve Fibres Evidenced by Histamine H ₃ -Receptor Modulation in Rat Lung and Spleen," <i>Clinical Science</i> , 87:151-163 (1994).
C10	Dohle et al., "Copper-Mediated Cross-Coupling of Functionalized ArylMagnesium Reagents with Functionalized Alkyl and Benzylic Halides," <i>Organic Letters</i> 3(18):2871-2873 (2001)
C11	Duméry et al., "Development of Amygdaloid Cholinergic Mediation of Passive Avoidance Learning in the Rat," <i>Exp. Brain. Res.</i> , 67:61-69 (1987).
C12	Ellingboe et al., "Antihyperglycemic Activity of Novel Naphthalenyl 3H-1,2,3,5-Oxathiadiazole 2-Oxides," <i>J. Med. Chem.</i> 36:2485-2493 (1993)
C13	Elworthy et al., "The Configurational Stability of Chiral Lithio α -Amino Carbanions. The Effect of Li-O vs. Li-N Complexation," <i>Tetrahedron</i> 50(20):6089-6096 (1994)
C14	Fitzsimons et al., "Histamine Receptors Signalling in Epidermal Tumor Cell Lines With H-ras Gene Alterations," <i>Inflamm. Res.</i> , 47, Supplement 1, S50-S51 (1998).
C15	Fox et al., "Effects of Histamine H ₃ Receptor Ligands GT-2331 And Ciproxifan in a Repeated Acquisition Response in the Spontaneously Hypertensive Rat Pup," <i>Behavioural Brain Research</i> 131:151-161 (2002)
C16	Gaffield et al., "Chiroptical Properties of N-Nitrosopyrrolidines and N-Nitrosamino Acids," <i>Tetrahedron</i> 37:1861-1869 (1981)
C17	Haas et al., Subcortical Modulation of Synaptic Plasticity in the Hippocampus," <i>Behavioural Brain Research</i> , 66:41-44 (1995).
C18	Hartwig, "Transition Metal Catalyzed Synthesis of Arylamines and Aryl Ethers From Aryl Halides and Triflates: Scope And Mechanism," <i>Angew. Chem. Int. Ed.</i> 37:2046-2067 (1998)
C19	Hatta et al., "Activation of Histamine H ₃ Receptors Inhibits Carrier-Mediated Norepinephrine Release in a Human Model of Protracted Myocardial Ischemia ^{1, 2} ," <i>The Journal Of Pharmacology And Experimental Therapeutics</i> , 283(2):494-500 (1997).
C20	Imamura et al., "Activation Of Histamine H ₃ -Receptors Inhibits Carrier-Mediated Norepinephrine Release During Protracted Myocardial Ischemia," <i>Circulation Research</i> , 78(3):475-481 (1996).
C21	Imamura et al., "Histamine H ₃ -Receptor-Mediated Inhibition Of Calcitonin Gene-Related Peptide Release From Cardiac C Fibers," <i>Circulation Research</i> , 78(5):863-869 (1996).
C22	Itoh et al., "Thioperamide, A Histamine H ₃ Receptor Antagonist, Powerfully Suppresses Peptide YY-Induced Food Intake In Rats," <i>Biol. Psychiatry</i> 45:475-481 (1999)
C23	Kamei et al., "Influence Of Certain H ₁ -Blockers On The Step-Through Active Avoidance Response In Rats," <i>Psychopharmacology</i> , 102:312-318 (1990).
C24	Kamei et al., "Participation Of Histamine In The Step-Through Active Avoidance Response And Its Inhibition By H ₁ -Blockers," <i>Japan J. Pharmacol.</i> , 57:473-482 (1991).
C25	Karrer et al., "Helvetica Chimica Acta. 34(270):2202-2210 (1951)
C26	Kiyomori et al., "An Efficient Copper-Catalyzed Coupling Of Aryl Halides With Imidazoles," <i>Tetrahedron Letters</i> 40:2657-2660 (1999)
C27	Klapars et al., "A General And Efficient Copper Catalyst For The Amidation of Aryl Halides And The N-Arylation Of Nitrogen Heterocycles," <i>J. Am. Chem. Soc.</i> 123:7727-7729 (2001)
C28	Kwong et al., "Copper-Catalyzed Coupling Of Alkylamines And Aryl Iodides: An Efficient System Even In An Air Atmosphere," <i>Organic Letters</i> 4(4):581-584 (2002)
C29	Leurs et al., "The Histamine H ₃ -Receptor: A Target For Developing New Drugs," <i>Progress In Drug Research</i> , 39:127-165 (1992).
C30	Leurs et al., "The Medicinal Chemistry And Therapeutic Potentials Of Ligands Of The Histamine H ₃ Receptor," <i>Progress In Drug Research</i> , 45:107-165 (1995).
C31	Leurs et al., "Therapeutic Potential Of Histamine H ₃ Receptor Agonists And Antagonists," <i>Trends In Pharm. Sci.</i> 19:177-183 (1998).
C32	Levi et al., "Histamine H ₃ -Receptors: A New Frontier In Myocardial Ischemia," <i>The Journal Of Pharmacology And Experimental Therapeutics</i> , 292(3):825-830 (2000).

	C33	Li et al., "Highly Active, Air-Stable Versatile Palladium Catalysts For The C-C, C-N, And C-S Bond Formations Via Cross-Coupling Reactions Of Aryl Chlorides," <i>J. Org. Chem.</i> 66:8677-8681 (2001)
	C34	Li et al., "The First Phosphine Oxide Ligand Precursors For Transition Metal Catalyzed Cross-Coupling Reactions: C-C, C-N, And C-S Bond Formation On Unactivated Aryl Chlorides," <i>Angew. Chem. Int. Ed.</i> 40(8):1513-1516 (2001)
	C35	Lin et al., "Involvement Of Histaminergic Neurons In Arousal Mechanisms Demonstrated With H ₃ -Receptor Ligands In The Cat," <i>Brain Research</i> , 523:325-330 (1990).
	C36	Lipshutz et al., "Efficient Scavenging Of Ph ₃ P And Ph ₃ P=O With High-Loading Merrifield Resin," <i>Organic Letters</i> 3(12):1869-1871 (2001)
	C37	Lipshutz et al., "Substitution Reactions Of Aryl Chlorides With Organozinc Reagents Catalyzed By Ni(0)," <i>Tetrahedron Letters</i> 40:197-200 (1999)
	C38	Littke et al., "Versatile Catalysts For The Suzuki Cross-Coupling Of Arylboronic Acids With Aryl And Vinyl Halides And Triflates Under Mild Conditions," <i>J. Am. Chem. Soc.</i> 122:4020-4028 (2000)
	C39	Marcoux et al., "A General Copper-Catalyzed Synthesis Of Diaryl Ethers," <i>J. Am. Chem. Soc.</i> 119:10539-10540 (1997)
	C40	Matsubara et al., "UK-14,304, R(-) ∇ -Methyl-Histamine And SMS 201-995 Block Plasma Protein Leakage Within Dura Mater By Prejunctional Mechanisms," <i>European Journal Of Pharmacology</i> , 224:145-150 (1992).
	C41	Mazurkiewicz-Kwilecki et al., "Changes In The Regional Brain Histamine And Histidine Levels In Postmortem Brains Of Alzheimer Patients," <i>Can. J. Physiol. Pharmacol.</i> 67: 75-78 (1989).
	C42	McLeod et al., "Histamine H ₃ Antagonists," <i>Progress In Resp. Research</i> 31:133-134 (2001)
	C43	Miyaura et al., "Palladium-Catalyzed Cross-Coupling Reactions Of Organoboron Compounds," <i>Chem. Rev.</i> 95:2457-2483 (1995)
	C44	Mohanakrishnan et al., "Pd(0)-Mediated Cross Coupling Of 2- <i>lodoestradiol</i> With Organozinc Bromides: A General Route To The Synthesis Of 2-Alkynyl, 2-Alkenyl And 2-Alkylestradiol Analogs," <i>Synlett.</i> 7:1097-1099 (1999)
	C45	Molander et al., "Cross-Coupling Reactions Of Primary Alkylboronic Acids With Aryl Triflates And Aryl Halides," <i>Tetrahedron</i> 58:1465-1470 (2002)
	C46	Monti et al., "Effects Of Selective Activation Or Blockade Of The Histamine H ₃ Receptor On Sleep And Wakefulness," <i>European Journal Of Pharmacology</i> , 205:283-287 (1991).
	C47	Monti et al., "Sleep And Waking During Acute Histamine H ₃ Agonist BP2.94 Or H ₃ Antagonist Carboperamide (MR 16155) Administration In Rats," <i>Neuropsychopharmacology</i> , 15(1):31-35 (1996).
	C48	Murakami et al., "AQ-0145, A Newly Developed Histamine H ₃ Antagonist, Decreased Seizure Susceptibility Of Electrically Induced Convulsions In Mice," <i>Meth. Find. Exp. Clin. Pharmacol.</i> 17(C):70-73 (1995)
	C49	Nijhuis et al., "Stereochemical Aspects Of The "Terti-Amino Effect." 2. Enantio- And Diastereoselectivity In The Synthesis Of Quinolines, Pyrrolo[1,2- <i>a</i>]Quinolines, And [1,4]Oxazino[4,3- <i>a</i>]Quinolines," <i>J. Org. Chem.</i> 54:209-216 (1989)
	C50	Onodera et al., "Neuropharmacology Of The Histaminergic Neuron System In The Brain And Its Relationship With Behavioral Disorders," <i>Progress In Neurobiology</i> , 42:685-702 (1994).
	C51	Palomo et al., "Phosphazene Bases For The Preparation Of Biaryl Thioethers From Aryl Iodides And Arenethiols," <i>Tetrahedron Letters</i> 41:1283-1286 (2000)
	C52	Palucki et al., "Palladium-Catalyzed Intermolecular Carbon-Oxygen Bond Formation: A New Synthesis Of Aryl Ethers," <i>J. Am. Chem. Soc.</i> 119:3395-3396 (1997)
	C53	Pan et al., "Histaminergic Ligands Attenuate Barrel Rotation in Rats Following Unilateral Labyrinthectomy," <i>Meth. Find Exp. Clin. Pharmacol</i> 20(9):771-777 (1998)
	C54	Panula et al., "Brain Histamine In Pathophysiological Conditions And Brain Diseases," The Histamine H ₃ Receptor, 243-253 (1998)
	C55	Perez-Garcia et al., "Effects Of Histamine H ₃ Receptor Ligands In Experimental Models Of Anxiety And Depression," <i>Psychopharmacology</i> 142:215-220 (1999)
	C56	Phillips et al., "Recent Advances In Histamine H ₃ Receptor Agents," <i>Annual Reports In Medicinal Chemistry</i> , 33:31-40 (1998).
	C57	Rouleau, "Bioavailability, Antinociceptive And Antiinflammatory Properties Of BP 2-94, A Histamine H ₃ Receptor Agonist Prodrug," <i>The Journal Of Pharmacology And Experimental Therapeutics</i> , 281(3):1085-1094 (1997).

	C58	Sakai et al., "Effects Of Thioperamide, A Histamine H ₃ Receptor Antagonist, On Locomotor Activity And Brain Histamine Content In Mast Cell-Deficient W/WV Mice," <i>Life Sciences</i> , 48:2397-2404 (1991).
	C59	Schopfer et al., "A General Palladium-Catalysed Synthesis Of Aromatic And Heteroaromatic Thioethers," <i>Tetrahedron</i> 57:3069-3073 (2001)
	C60	Schwartz et al., "Histaminergic Transmission in the Mammalian Brain," <i>Physiological Reviews</i> 71(1):1-51 (1991)
	C61	Schwartz et al., "Histamine," <i>Psychopharmacology: The Fourth Generation Of Progress</i> , 397-405 (1995).
	C62	Shaywitz et al., "Dopaminergic But Not Noradrenergic Mediation Of Hyperactivity And Performance Deficits In The Developing Rat Pup," <i>Psychopharmacology</i> , 82:73-77 (1984).
	C63	Sugahara et al., "A Facile Copper-Catalyzed Ullmann Condensation: N-Arylation Of Heterocyclic Compounds Containing an -NHCO- Moiety," <i>Chem. Pharm. Bull.</i> 45(4):719-721 (1997)
	C64	Suzuki, "Recent Advances In The Cross-Coupling Reactions Of Organoboron Derivates With Organic Electrophiles, 1995-1998," <i>Journal Of Organometallic Chemistry</i> 576:147-168 (1999)
	C65	Szelag, "Role Of Histamine H ₃ -Receptors In The Proliferation Of Neoplastic Cells In Vitro," <i>Med. Sci. Monit.</i> , 4(5):747-755 (1998).
	C66	Tedford et al., "Cognition And Locomotor Activity In The Developing Rat: Comparisons Of Histamine H ₃ Receptor Antagonists And ADHD Therapeutics," <i>Society For Neuroscience Abstr.</i> , 22:22 (1996).
	C67	Tedford et al., "Pharmacological Characterization Of GT-2016, A Non-Thiourea-Containing Histamine H ₃ Receptor Antagonist: <i>In Vitro</i> And <i>In Vivo</i> Studies," <i>The Journal Of Pharmacology And Experimental Therapeutics</i> , 275(2):598-604 (1995).
	C68	Tedford, "Clinical Application Of HA H ₃ Receptor Antagonists In Learning And Memory Disorders," <i>The Histamine H₃ Receptor</i> 269-286 (1998)
	C69	Toshimitsu et al., "Preparation, Structure, And Reactivity Of Pentacoordinate Disilanes Bearing An 8-Charcogeno-1-Naphthyl Group And A Heteroatom On The Same Silicon Atom," <i>Heteroatom Chemistry</i> 12(5):392-397 (2001)
	C70	Wada et al., "Is The Histaminergic Neuron System A Regulatory Center For Whole-Brain Activity?," <i>Trends In Neurosciences</i> , 14(9):415-418 (1991).
	C71	Wolfe et al., "Rational Development Of Practical Catalysts For Aromatic Carbon-Nitrogen Bond Formation," <i>Acc. Chem. Res.</i> 37:805-818 (1998)
	C72	Wolfe et al., "Simple, Efficient Catalyst System For The Palladium-Catalyzed Amination Of Aryl Chlorides, Bromides, And Triflates," <i>J. Org. Chem.</i> 65:1158-1174 (2000)
	C73	Yamada et al., "A Biogenetic-Type Asymmetric Cyclization Syntheses Of Optically Active α -Cyclocitral And Trans- α -Damascone," <i>Tetrahedron Letters</i> 5:381-384 (1973)
	C74	Yamamoto et al., "Ullmann Condensation Using Copper Or Copper Oxide As The Reactant. Arylation Of Active Hydrogen Compound (Imides, Amides, Amines, Phenol, Benzoic Acid, And Phenylacetylene)," <i>Can. J. Chem.</i> 61:86-91 (1983)
	C75	Yang et al., "Palladium-Catalyzed Amination Of Aryl Halides And Sulfonates," <i>Journal Of Organometallic Chemistry</i> 576:125-146 (1999)
	C76	Yates et al., "Effects Of A Novel Histamine H ₃ Receptor Antagonist, GT-2394, On Food Intake And Weight Gain In Sprague-Dawley Rats," <i>Abstracts, Society For Neuroscience</i> , 102.10:219 (November 2000)
	C77	Yokoyama et al., "Effect Of Thioperamide, A Histamine H ₃ Receptor Antagonist, On Electrically Induced Convulsions In Mice," <i>Journal Of Pharmacology</i> , 234:129-133 (1993).
	C78	Yokoyama et al., "Histamine And Seizures Implications For The Treatment Of Epilepsy," <i>CNS Drugs</i> , 5(5):321-330 (1996).
	C79	Zou et al., "Ag(I)-Promoted Suzuki-Miyaura Cross-Couplings Of N-Alkylboronic Acids," <i>Tetrahedron Letters</i> 42:7213-7215 (2001)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.